

CLAIMS

What is claimed is:

1. A monitor stand height adjustment mechanism, comprising:
 - a first assembly configured to produce a fixed lifting force;
 - a second assembly configured to produce a user configurable friction force;
 - a monitor support assembly operably connected to the first assembly and the second assembly, the monitor support assembly configured to support a monitor and to have the fixed lifting force and the user configurable friction force counteract a vertical downward force produced by the monitor; and
 - a monitor support assembly guide configured to direct and constrain a vertical motion of the monitor support assembly.
2. The monitor stand height adjustment mechanism of claim 1, where the first assembly includes one or more of, a spring, and a gas assist cylinder.
3. The monitor stand height adjustment mechanism of claim 1, where the monitor support assembly can be moved vertically by applying a force with a vertical component of less than ten Newtons to one or more of, the monitor support assembly, and the monitor.
4. The monitor stand height adjustment mechanism of claim 1, where the monitor support assembly can be moved vertically by applying a force with a vertical component of less than one Newton to one or more of, the monitor support assembly, and the monitor.
5. The monitor stand height adjustment mechanism of claim 1, where the second assembly includes one or more of, a user moveable lever configured to bear on one or more of, the monitor support assembly and the monitor support assembly guide to produce the friction force, and a user turnable screw configured to bear on one or more of, the monitor support assembly, and the monitor support assembly guide to produce the friction force.
6. The monitor stand height adjustment mechanism of claim 1, where the second assembly includes one or more of, a user moveable friction plate configured to bear on one or

more of, the monitor support assembly and the monitor support assembly guide to produce the user configurable friction force, and an arm configured to bear on one or more of, the monitor support assembly, and the monitor support assembly guide to produce the user configurable friction force.

7. The monitor stand height adjustment mechanism of claim 1, where the monitor is one or more of, a flat panel computer monitor, and a flat panel television.

8. A monitor stand configured with a height adjustment mechanism that facilitates positioning a monitor in a user-selected stationary vertical position without locking the monitor in place, comprising:

- a base;

- means for providing a fixed lifting force to facilitate holding the monitor in the user-selected stationary vertical position;

- a guide supported by the base;

- an attachment assembly that moves in a vertical path dictated by the guide, that includes means for supporting the monitor, and that is configurable to receive the fixed lifting force; and

- a height adjustment mechanism that includes:

- a friction assembly operably connected to one or more of, the guide, and the attachment assembly, the friction assembly being configured to produce a user controllable frictional force between the guide and the attachment assembly, the frictional force further facilitating holding the monitor in the user-selected stationary vertical position, and

- a user controllable friction control operably connected to the friction assembly, and configured to facilitate selectively establishing the amount of user controllable frictional force produced by the friction assembly.

9. The monitor stand of claim 8, where the means for providing a fixed lifting force includes one or more of, a spring, and a gas assist cylinder.

10. The monitor stand of claim 8, where the monitor stand is configured to allow the position of the monitor, after being positioned at the user-selected stationary vertical position,

to be repositioned vertically by a force with a vertical component of less than ten Newtons applied to one or more of, the monitor, and the attachment assembly.

11. The monitor stand of claim 8, where the monitor stand is configured to allow the position of the monitor, after being positioned at the user-selected stationary vertical position, to be repositioned vertically by a force with a vertical component of less than one Newton applied to one or more of, the monitor, and the attachment assembly.

12. The monitor stand of claim 8, where the friction assembly includes one or more of, a lever that can produce the user controllable frictional force by bearing on one or more of, the guide, and the attachment assembly, and a screw that can produce the user controllable frictional force by bearing on one or more of, the guide, and the attachment assembly.

13. The monitor stand of claim 8, where the friction assembly includes a friction plate configured to be moveable against one or more of, the guide, and the attachment assembly, where the friction plate can produce the user controllable frictional force by bearing on one or more of, the guide, and the attachment.

14. The monitor stand of claim 8, where the user controllable friction control comprises a screwhead.

15. The monitor stand of claim 8, where the user controllable friction control comprises a knob.

16. The monitor stand of claim 8, where the user controllable friction control comprises a lever.

17. An apparatus, comprising:

means for supplying a lifting force that facilitates vertically positioning an object in a desired stationary but unlocked position;

means for supplying a frictional force that facilitates holding the object in the desired stationary but unlocked position;

means for applying the lifting force to the object;

means for guiding a direction of travel of the means for applying the lifting force to the object; and

means for applying the frictional force between the means for guiding the direction of travel and the means for applying the lifting force.

18. The apparatus of claim 17, where the means for supplying the lifting force includes one or more of, a spring, a gas assist cylinder, a lever, and a counterbalance.

19. The apparatus of claim 17, where the means for applying the frictional force includes one or more of, a screw, a knob, a plate, and an arm.

20. A monitor stand configured to support one monitor at a time, comprising:
a monitor carrying assembly configured to carry a monitor;
a first assembly operably connected to the monitor carrying assembly and configured to produce a fixed lifting force that will counteract a first vertical force produced by a first monitor with a first weight supported by the monitor stand; and
a second assembly operably connected to the monitor carrying assembly and configured to produce a configurable friction force that, in combination with the fixed lifting force, will counteract a second vertical force produced by a second monitor with a second weight supported by the monitor stand, the second weight being different than the first weight.

21. A method for mechanically carrying a monitor at a desired vertical position without securing the monitor in that vertical position, comprising:

applying a first force with a vertical component to a mechanical apparatus that facilitates carrying the monitor at the desired vertical position;

automatically determining whether to apply a separate frictional force with a vertical component to further facilitate carrying the monitor at the desired vertical position; and

causing the monitor to be carried at the desired vertical position without securing the monitor in the desired vertical position by a combination of the first force and the frictional force in response to the frictional force being selectively applied to the mechanical apparatus.

22. The method of claim 21, where the first force is generated by one or more of, a spring, a gas assist cylinder, a lever, and a counterbalance.
23. The method of claim 21, where the monitor can be moved from the desired vertical position without adjusting the first force or the frictional force, in response to a force with a vertical component of less than ten Newtons being applied to the monitor.
24. The method of claim 21, where the monitor can be moved from the desired vertical position without adjusting the first force or the frictional force, in response to a force with a vertical component of less than one Newton being applied to the monitor.
25. The method of claim 21, where the frictional force is generated by one or more of, a screw, a knob, a plate, an arm, and a lever.